

December 7, 2000 Project No. 97664V3

Ms. Brenda Pohlmann Nevada Division of Environmental Protection 555 E. Washington, Suite 4300 Las Vegas, NV 89101-1049

Northshore Road bridge.

PROVIDING

- Geotechnical Engineering
- Construction Materials Testing
- Environmental Site Assessments
- Drilling Services

Dear Ms. Pohlmann:

RE:

Per your request, Geotechnical & Environmental Services, Inc. (GES) obtained a surface water sample from the Las Vegas wash on November 29, 2000 near the Northshore Road Bridge. We sent this sample, under chain-of-custody protocol, to NEL Laboratories (NEL) for laboratory analysis of perchlorate. NEL's analysis revealed a perchlorate concentration of 370 micrograms per Liter (μ g/L). The NEL report is included with this letter, along with the Perchlorate Summary Table for 2000.

Results of monthly surface water sampling of the Las Vegas Wash at the

Our services were performed using that degree of care and skill ordinarily exercised under similar circumstances by reputable engineering firms in this or similar localities. No other warranty, either express or implied, is included or intended in this report. We appreciate this opportunity to provide our services. If you have any questions regarding these results, please feel free to call us at 365-1001.

Sincerely.

Geotechnical & Environmental Services, Inc.

Daniel C. Burns, C.E.M.* #1692 (Expires 10/07/2001)

Project Manager

Gregory F. DeSart, F.E., C.E.M. #1172 (Expires 12/22/2002)

President

* "I hereby certify that I am responsible for the services described in this document and for the preparation of this document. The services described in this document have been provided in a manner consistent with the current standards of the profession and to the best of my knowledge comply with all applicable federal, state and local statutes, regulations and ordinances."

Enc:

2000 Perchlorate Summary Table

NEL Analytical Report

Dist:

1 faxed to addressee at 486-2863

1 original mailed to addressee cc: fax to Jeff Gibson, American Pacific Corporation

cc: mail to Kevin Mayer, USEPA SFD 72, 75 Hawthorne Street, San Francisco, CA 94105

cc: to project file 97664V3

7560 W. Sahara Ave., Suite 101 Las Vegas, NV 89117 (702) 365-1001 • Fax (702) 341-7120 www.gesnevada.com Nevada Division of Environmental Protection Project No. 97664V3 December 7, 2000 Page 2

Las Vegas Wash at Northshore Road Bridge 2000 Summary of Perchlorate Concentrations

Date Sampled	Perchlorate (μg/L)				
1/27/00	569				
2/28/00	720				
3/29/00	870				
4/27/00	750				
5/30/00	. 740				
6/28/00	410				
7/27/00	650				
8/28/00	510				
9/27/00	430				
10/26/00	340				
11/29/00	370				

Reno . Las Vegas . Boise Phoenix · Sacramento

Las Vagas Division 4208 Arcata Way, Suite A - Las Vegas, NV 89030 (702) \$57-1010 · Fax: (702) 657-1577 1-888-368-3282

CLIENT:

Geotechnical & Env. Serv.

7560 West Sahara Ave. #101

Las Vegas, NV 89117

ATTN:

Michael J. Kirk

PROJECT NAME:

FPF/97664 V3

PROJECT NUMBER: 97664 V3

NEL ORDER ID: L0011266

Attached are the analytical results for samples in support of the above referenced project.

Samples submitted for this project were not sampled by NEL Laboratories. Samples were received by NEL in good condition, under chain of custody on 11/29/00.

Should you have any questions or comments, please feel free to contact our Client Services department at (702) 657-1010.

Stan Van Wagenen Laboratory Manager

CERTIFICATIONS:

Reno AZ0520 Arizona AZ0518 California 1707 2002

US Army Corps

of Engineers

Las Vegas S. California AZ0605 2264 Certified Certified

Idaho Montana Nevada L.A.C.S.D.

Las Vegas S. California Reno Certified Certified Certified Certified

NV033

CA084 NV052 10228

CLIENT:

Geotechnical & Env. Serv.

PROJECT ID:

FPF/97664 V3

PROJECT #:

97664 V3

CLIENT ID:

North Shore Road Bridge

DATE SAMPLED: 11/29/00

NEL SAMPLE ID: L0011266-01

TEST:

Inorganic Non-Metals

MATRIX:

Aqueous

PARAMETER	RESULT	R. L.	<u>D. F.</u>	METHOD	UNITS	ANALYZED
Perchlorate	370	40.	10	EPA 314	μ g/L	12/5/00.

R.L. - Reporting Limi

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT:

Georechnical & Env. Serv.

PROJECT ID:

FPF/97664 V3

PROJECT #:

97664 V3

CLIENT ID:

Method Blank

DATE SAMPLED: NA

NEL SAMPLE ID: 001205CLO4-BLK

TEST:

Non-Metals

REPORTING

LIMIT

D. F.

UNITS

Perchlorate

ND

 $\mu g/L$

12/5/00

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

3

CHAIN OF CUSTODY

NEL Work Order: CUCII CUB

6	MICHAEL J. KIRK	Relinquished by (Print)	Custody Seal intact?			·	08-11/0580 N	Time/Date Sampled	Requested Turnaround:	Billing Address:	Phone Number: 215 1001	Company:	Las Vegas Division • 4: 702-657-10		÷
	Me Men man	(Signature)	Y N None Temp	8			NORTH SHORE ROAD BRUSSE	Customer Sample Identification	X 5-day 2-day	311	TSLO W. SAHARA # (01 L.U., NU. 84117	Attention:	Las Vegas Division • 4208 Arcala Way, Suile A • Las Vegas, Nevada 89030 702-657-1010 • Fax: 702-657-1577 • 688-358-3282 GES	Phoenix • Sacramento	Bon . I se Venas .
	11-28-00/0	Date/	9 20				0)	EL	1-day Other Containe	d Due Date:	3			8	Brise
	Date/Time					2	Mat	rix (Box# servative	1) (Box #2	<u>")</u>			Project Name: FPF Purchase Order Number		
	-1	Raceived by	Box #1				7	Ata	WORME			Analysis	1847		
	Samoloc	(Print)	DW - Dighling Water WW - Waste Water OL - Chivorganic Liquid										7		
	A	(9)	SD - Salid AG - Aljueaus A - Air											Project Number	
	1	(Signature)	Box #2										M. KIRK	9764 V3	
	11-29-00/09	Date/Tim9	A. HCI (S) to Only B. HNO F. Other C. H, \$O, G. Not Preserved D. NACH					Remarks						V3	

The liability of NEL Laboratories inc. is limited strictly to the pice of sample analysis for those samples received in good condition, by NEL is not responsible for loss, demage, resampling costs and/or qualified data related to samples not received in good condition, including adequate sample volume and number of containers. Customer signature of this CoC constitutes a purchase order to NEL to perform work and constitutes acceptance of all NEL Standard Terms and Conditions. Signature also constitutes acceptance of NEL to perform work and constitutes acceptance of all NEL Standard Terms and Conditions. Signature also constitutes acceptance of all NEL standard Terms and Conditions. Signature also constitutes acceptance of all NEL standard Terms and Conditions. Signature also constitutes acceptance of all NEL standard Terms and Conditions. Signature also constitutes acceptance of all NEL standard Terms and Conditions. Signature also constitutes acceptance of all NEL standard Terms and Conditions. Signature also constitutes acceptance of all NEL standard Terms and Conditions. Signature also constitutes acceptance of all NEL standard Terms and Conditions. Signature also constitutes acceptance of all NEL standard Terms and Conditions. Signature also constitutes acceptance of all NEL standard Terms and Conditions. Signature also constitutes acceptance of all NEL standard Terms and Conditions. Signature also constitutes acceptance of all NEL standard Terms and Conditions. Signature also constitutes acceptance of all NEL standard Terms and Conditions. Signature also constitutes acceptance of all NEL standard Terms and Conditions. Signature acceptance of all NEL standard Terms and Conditions. Signature acceptance of all NEL standard Terms and Conditions. Signature acceptance of all NEL standard Terms and Conditions. Signature acceptance of all NEL standard Terms and Conditions. Signature acceptance of all NEL standard Terms and Conditions. Signature acceptance of all NEL standard Terms and Conditions. Signature accepta